Oysters

Wadden Sea

Oysters are defined as: Monomyarian bivalves that are cemented by their left valve to the substrate in the post-larval state (Bayne, 2017). Since 1950, the only oyster that can be found in the Wadden Sea is the invasive Pacific oyster (*Crassostrea gigas*) (Berghahn & Ruth, 2004). Oysters fall within the category of filter feeders. Filter feeders are creatures capable of assimilating suspended or floating organic matter via a complex filtration organ(s) that allow them to syphon sustenance from the water column (Jeschke et al., 2007).

History/ Population trends

Oysters have been gathered and farms many centuries. Inhabitants of the Wadden Sea have collected and hunted marine resources since its origin, about 7500 years ago (Lotze, 2007). The first farming of oyster in the Wadden Sea occurred about 5000 years ago to 500 years ago (Lotze, 2007). Then mammal and fish farms took over the original function of the oyster farms, causing an increase in oyster picking (Lotze, 2007). However, oysters were harvested so intensely that the last confirmed European oysters (*Ostrea edulis*) were found in the early 1950's (Berghahn & Ruth, 2004). This disappearance, in part, allowed an invasive species of oyster to become the primary oyster in the area (Berghahn & Ruth, 2004; Nell, 2002).

In 1985, the West coast of North America started with the production of commercial triploid oysters (Nell, 2002). A triploid oyster means that the oyster has three DNA-strands in its genome, instead of one (Sellars, 2013). This causes triploid oysters to produce no offspring and not even sperm or egg cells (Nell, 2002). Before the triploid oyster, people often would not eat oysters during their breeding season (Nell, 2002). Therefore, the oyster production from farms increased significantly (Nell, 2002; Berghahn & Ruth, 2004).

Miscellaneous

- The largest oyster ever found was a Pacific oyster from Denmark, with a shell length of 35.5cm (Guinness World Records, 2018).
- The oldest fossil that was reliably identified as a species of oyster is 252 to 251 million years old (Hautmann et al., 2017).

Diets

- Zooplankton (Jeschke et al., 2007)
- Phytoplankton (Jeschke et al., 2007)

Sources

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